CHAPTER

2

The Economic Outlook

The economy continues to suffer from some aftereffects of the bursting of the "bubble economy" of the late 1990s. Although consumer spending is expanding moderately, business investment remains weak, and financial markets are uncertain about the durability of the current recovery. Nevertheless, the Congressional Budget Office believes that the stage is set for stronger economic activity this year—an opinion shared by many private-sector economists, as represented by the *Blue Chip* consensus forecast.

Much of the boom of the late 1990s was based on persistently faster growth in productivity. However, the tremendous surges in the stock market and in investment spending that occurred at that time were partly based on expectations for corporate profits that are now understood to have been unreasonable. That "bubble" part of the boom burst in early 2000, and the following year the economy entered a relatively shallow recession (as measured by the drop in output). The economy recovered in 2002, but it was buffeted by revelations that a small number of notable corporations had engaged in accounting irregularities during the bubble years. Those revelations shook the confidence of investors, consumers, and businesses. The stock market fell sharply again, and private-sector employment declined in the second half of the year.

The strength of the economy in 2003 depends in large part on whether consumer spending will continue to provide the economy's foundation. Throughout the 2001 recession and the early recovery, the household sector has been a source of strength. Expansionary fiscal and monetary policies are partly responsible for that strength: the lowest mortgage interest rates since the 1960s have triggered a wave of refinancing and contributed to a boom in housing, zero percent financing has spurred sales of cars and light trucks, and tax cuts have bolstered disposable income. Those factors have largely offset the drag on consumer spending caused by declines in the stock market. In the future, however, they will play a smaller role in supporting spending. Thus, the growth of consumer spending will depend primarily on the growth of personal income.

The prospects for personal income in the short run are uncertain, however, because demand is anemic in many other parts of the economy. Spending by the business sector remains weak, as low corporate profits and excess capacity from overinvestment during the bubble years have inhibited investment. Uncertainty about the strength of demand and about the risks arising from terrorism and war have led businesses to be particularly cautious in hiring. In addition, state and local governments have had their spending weakened by deteriorating finances.

Nevertheless, some indicators point to a brighter outlook for the economy this year. Investors and consumers appear to have gained a bit more confidence about the economy in recent months. The stock market has tentatively moved upward since its low in October. The spread between interest rates on corporate bonds and Treasury notes narrowed slightly toward the end of 2002, suggesting that credit markets are somewhat less worried about corporate finances than they were earlier in the year. Consumer sentiment and expectations also appear to have stabilized late last year. Business spending on equipment and software, particularly on information technology, appears to

have strengthened in 2002, and inventories may be reaching the point at which businesses need to restock their shelves. Finally, a drop in the exchange value of the U.S. dollar is conducive to stronger growth of exports.

CBO's economic forecast expects the recovery to continue, with real (inflation-adjusted) gross domestic product growing by 2.5 percent in calendar year 2003 and 3.6 percent in 2004 (*see Table 2-1*). That growth is slower than in most past recoveries but is comparable to the pace after the 1990-1991 recession (*see Figure 2-1*). The growth of housing investment is expected to slow substantially, while real spending for personal consumption should continue to increase by about 3 percent a year. Investment in producers' durable equipment is expected to recover, but investment in structures will remain weak for some time. In CBO's forecast, the unemployment rate is stable in 2003, averaging 5.9 percent, and then edges down only to an average rate of 5.7 percent in 2004. As the recovery achieves a firmer footing, the Federal Reserve is assumed to shift monetary policy gradually from its current accommodative stance toward a more neutral one; consequently, both short-term and long-term interest rates are expected to rise in late 2003 and during 2004. In this near-term forecast, inflation—as measured by the consumer price index for all urban consumers (CPI-U)—remains below 2.5 percent a year.

CBO's forecast assumes that there will be no significant repercussions for the U.S. economy from any war with Iraq and no shocks to the economy from major acts of terrorism. However, uncertainty about war and terrorism may continue to weigh on consumers and businesses, either directly or through its impact on stock prices. The forecast assumes that such uncertainty is not fully re-

Table 2-1.

CBO's Economic Projections for Calendar Years 2003 Through 2013

	Estimated	Forecast		Projected Annual Average	
	2002	2003	2004	2005-2008	2009-2013
Nominal GDP (Billions of dollars)	10,443	10,880	11,465	14,154[a]	18,066[b]
Nominal GDP (Percentage change)	3.6	4.2	5.4	5.4	5.0
Real GDP (Percentage change)	2.4	2.5	3.6	3.2	2.7
GDP Price Index (Percentage change)	1.1	1.6	1.7	2.1	2.2
Consumer Price Index[c] (Percentage change)	1.6	2.3	2.2	2.5	2.5
Unemployment Rate (Percent)	5.8	5.9	5.7	5.3	5.2
Three-Month Treasury Bill Rate (Percent)	1.6	1.4	3.5	4.9	4.9
Ten-Year Treasury Note Rate (Percent)	4.6	4.4	5.2	5.8	5.8
Tax Bases (Percentage of GDP)					
Corporate book profits	6.2	6.8	7.3	9.2	8.4
Wages and salaries	48.1	48.1	48.1	48.0	47.8
Tax Bases (Billions of dollars)					
Corporate book profits	653	739	842	1,267[a]	1,474[b]
Wages and salaries	5,025	5,237	5,518	6,782[a]	8,635[b]

Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

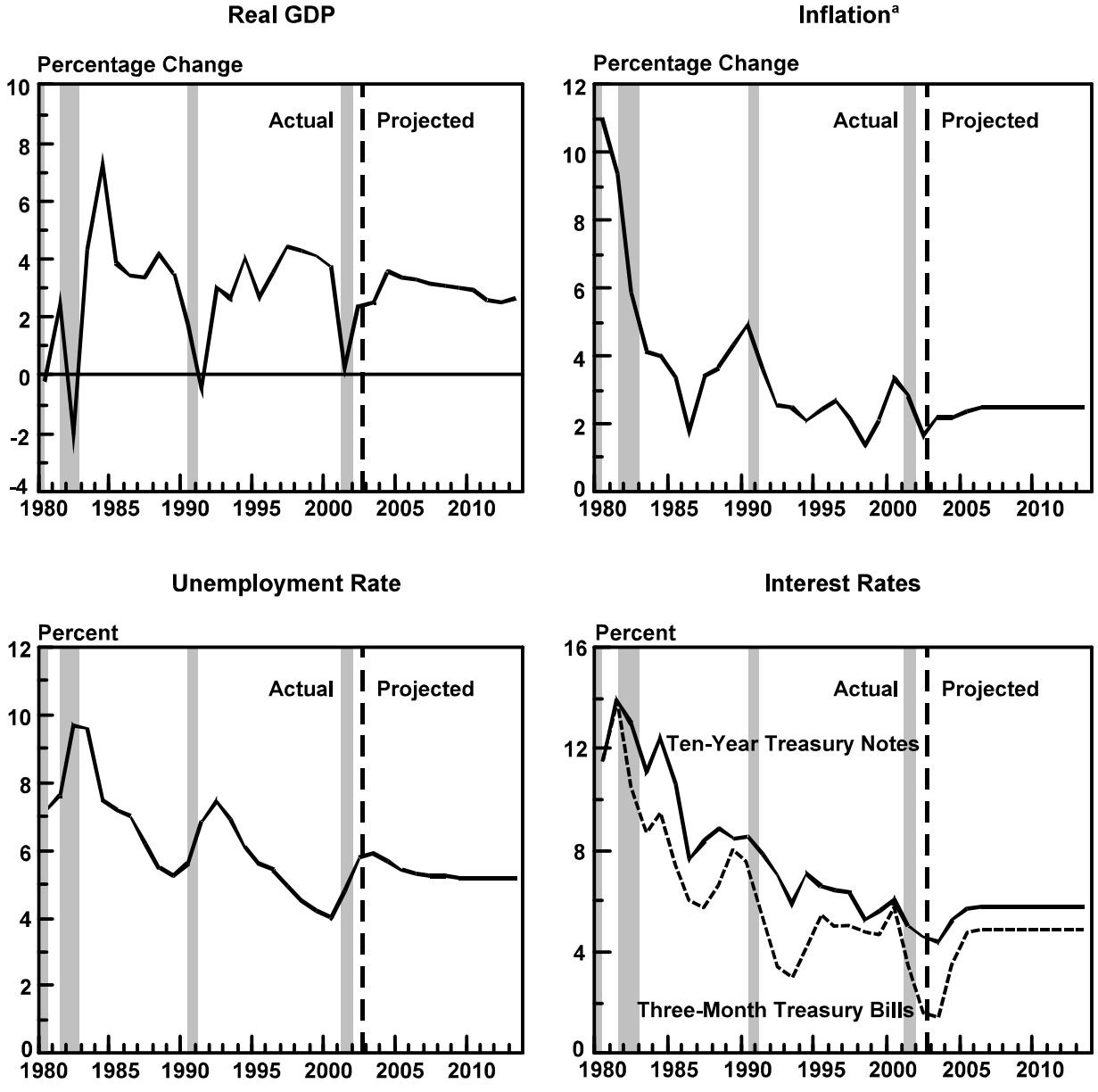
Notes: Percentage changes are year over year.

Year-by-year economic projections for calendar and fiscal years 2003 through 2013 appear in Appendix E.

a. Level in 2008.
b. Level in 2013.
c. The consumer price index for all urban consumers.

Figure 2-1.

The Economic Forecast and Projections



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

Note: All data are annual values; percentage changes are year over year.

a. The change in the consumer price index for all urban consumers, applying the current methodology to historical price data (CPI-U-RS).

Box 2-1.

The Economic Effects of Expiring Tax Cuts

The Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) is scheduled to expire in 2010. As a result, under current law, marginal income tax rates will rise in 2011, provisions for child credits and marriage-penalty relief will cease to apply, and estate and gift taxes will be reinstated. That expiration (often called a sunset) will also affect provisions in the tax code for pensions, individual retirement accounts, education, and miscellaneous items. (Those effects are described in detail in Chapter 3.)

The sunset of the 2001 tax law will have a complicated impact on the economy. The expiration of some provisions (such as those affecting marginal tax rates) will reduce gross domestic product, whereas the sunset of other provisions (such as the child credits) will increase it. On net, CBO estimates, the expiration of EGTRRA will lower GDP by about half a percent by 2013. That estimate is very uncertain, however, and CBO may revise that figure as it continues to analyze the issue.[1]

The major economic effect of the sunset stems from the rise in marginal tax rates. Those rates influence people's incentives to work and save because they determine how much additional income taxpayers can keep when they decide to work an extra hour or save an extra dollar. The sunset will also decrease the proportion of total income that is subject to taxation—as marginal tax rates rise, more people may seek to shelter more of their income by taking it in nontaxable rather than taxable forms.[2]

CBO estimates that in 2011, the first year after EGTRRA expires, the effective marginal tax rate on labor will rise by about 1.8 percentage points, while the effective tax rate on capital will increase by 0.6 percentage points (*see the table*). Those changes in effective tax rates are smaller than the changes in statutory income tax rates that will occur, because some income is not taxed.

Effective Marginal Income Tax Rates, 2001-2013
(In percent)

	Tax Rate on Labor	Tax Rate on Capital
2001	20.7	15.5
2002	20.5	15.5
2003	20.7	15.5
2004	20.3	15.4
2005	20.3	15.4
2006	19.9	15.1
2007	20.1	15.1
2008	20.3	15.1
2009	20.5	15.1
2010	20.7	15.1
2011	22.5	15.7
2012	22.8	15.7
2013	22.9	15.7

Source: Congressional Budget Office.

Note: Includes federal individual and corporate income taxes; excludes payroll taxes.

In the three years between the end of 2010 and the end of CBO's current projection period, the largest economic effects of the higher tax rates are likely to involve labor supply, which may shrink by between 0.4 percent and 1.2 percent from what it would have otherwise been. National saving, by contrast, is likely to rise.[3] But in a period as short as three years, changes in saving—and consequent increases in the capital stock—will probably not be large enough to offset the impact of a reduction in labor supply on the nation's productive capacity.

Economic outcomes could also be affected by the extent to which people anticipate the 2011 tax increase ahead of time. Workers who know that taxes will rise in a few years

1. The effect of taxes on the economy remains an unsettled area of economics. Some models suggest that GDP could decline by more than half a percent from the sunset of EGTRRA; other models suggest that GDP might increase.

2. Estimates of the increase in the extent of tax sheltering are normally the responsibility of the Joint Committee on Taxation. Preliminary CBO estimates are reflected in the Box 1-2 table in Chapter 1 and in Table 3-11 in Chapter 3.

3. National saving includes both government saving and private saving. Although private saving will probably decline because of the increase in marginal tax rates, government saving will rise (under current law) from the additional tax revenues. Simulations with several models suggest that, on net, national saving is likely to increase.

Box 2-1.
Continued

may tend to adjust their work so as to concentrate their income in the years before taxes go up. For instance, people close to retirement may work overtime in the lower-tax years and then retire somewhat earlier when taxes increase. Second earners in married-couple households may choose to work and earn income when taxes are relatively low and then leave the labor force when taxes are high. Thus, anticipation of the tax increase might increase GDP before 2011. However, people have different opinions about when and whether the tax law will expire—and also have widely varying opportunities to shift their income from one year to another—so making projections about those anticipatory responses is difficult. CBO assumed that, on average, anticipation of the tax increase would boost the annual level of GDP by less than 0.05 percent between now and 2011.

The economic effects of the sunset during CBO's projection period will also depend on people's expectations about what policymakers will do in later years (after 2013). Logically, there are several alternatives. CBO's budget baseline assumes that tax rates will be higher from 2011 to 2013, but because that baseline extends only through 2013, CBO is not required to make any specific assumption for subsequent years. One possibility is that the additional revenues and lower debt will allow taxes to be lower at some point after 2013 than they would be otherwise. If so, some people may choose to work less than they otherwise would when tax rates are high (such as between 2011 and 2013) but work more later when tax rates are low. Alternatively, people may assume that taxes will remain relatively high and that the additional revenues will lead to higher levels of spending. In that case, people will not change their labor supply as much as in the previous example. In any event, it is unclear when—or even if—people expect any of those changes to take place.

Simulations from economic models suggest that assumptions about future policy can significantly influence the long-term impact of a tax increase. If people expect that paying more taxes now means that tax rates can be lower in the future, GDP is generally higher in the long run. But if people think higher tax rates now mean that government consumption can be higher in the future (rather than taxes lower), then GDP is likely to be lower in the long run. However, those uncertainties affect the period after 2013 much more than the years from 2011 to 2013. CBO's simulations suggest that regardless of the policy choices made after the projection period, the sunset of EGTRRA will decrease GDP in the last three years of that period, although the amount of the decrease varies according to what is assumed about future policy. CBO was unable to determine what assumption about future policy was most appropriate. Thus, in constructing its baseline, CBO simply chose to use an average from a number of different assumptions and different models of the economy.

The estimated budgetary implications of those scenarios are strikingly small compared with the overall uncertainty of 10-year budget projections. (That uncertainty is detailed in Chapter 5.) The economic weakening caused by even so large a tax increase as the one that will occur when EGTRRA expires could reduce revenues by about $40 billion: $6 billion in 2011, $15 billion in 2012, and $18 billion in 2013. (The tax increase itself is expected to raise annual revenues by a total of about $600 billion over those three years). To the extent that people anticipate the tax increase and boost their taxable income in the lower-tax years before the sunset, revenues could be increased in those years. As a result, the economic repercussions of the sunset are likely to reduce revenues by less than that $40 billion over the entire 10-year period. By contrast, the difference between reasonably optimistic and pessimistic budget projections could amount to more than $6 trillion over those 10 years (see Chapter 5)—more than 100 times the difference caused by the tax increase. Clearly, even large percentage errors in calculating the economic impact of the sunset would play little role in the overall uncertainty of long-term budget projections.

A sudden tax increase such as that caused by the expiration of EGTRRA after 2010 might also risk creating a short-term economic slowdown. CBO does not attempt to forecast the cyclical movement of the economy more than two years ahead, so its baseline does not contain a recession in 2010. In the case of EGTRRA, moreover, it may not be reasonable to expect that the sunset would cause much of a slowdown. To the extent that disruptions would predictably affect the unemployment rate and inflation, the Federal Reserve could anticipate and offset those disruptions. Its task might be more difficult, however, if tax policy remained unclear in the years before the sunset.

solved in the near term. (For a discussion of how war might affect the U.S. economy under several alternative military scenarios, see Chapter 5.)

Beyond 2004, CBO projects that growth of real GDP will average 3.2 percent a year from 2005 through 2008 and then slow to 2.7 percent a year from 2009 through 2013. That downward trend in economic growth over the next decade primarily reflects slower growth in the labor force as the oldest members of the baby-boom generation begin to retire. The unemployment rate is expected to average 5.2 percent after 2008.

CBO's baseline projections reflect current law, which includes the expiration of the tax-cutting Economic Growth and Tax Relief Reconciliation Act of 2001 at the end of 2010. Thus, in CBO's baseline, tax rates will return to their pre-2001 levels in 2011. The expiration of that law will have complicated effects on the economy, although those effects are small relative to the overall uncertainty of the economic forecast (*see Box 2-1 on pages 26 and 27*). The most noticeable impact is that the growth of real GDP is reduced in 2011 and 2012.

Recent Economic Developments

The slow recovery from the 2001 recession continues. Consumer spending is still rising—helped by moderate growth in wages and salaries, the contribution of lower income tax rates to disposable income, and proceeds from the refinancing of home mortgages, but hindered by a decline in stock market wealth. The housing market, fueled by low interest rates, has been a consistent source of strength. Investment in business equipment has begun to revive, as some of the excess capacity built up in the late 1990s has been worked off. But that investment remains weak because of subdued demand.

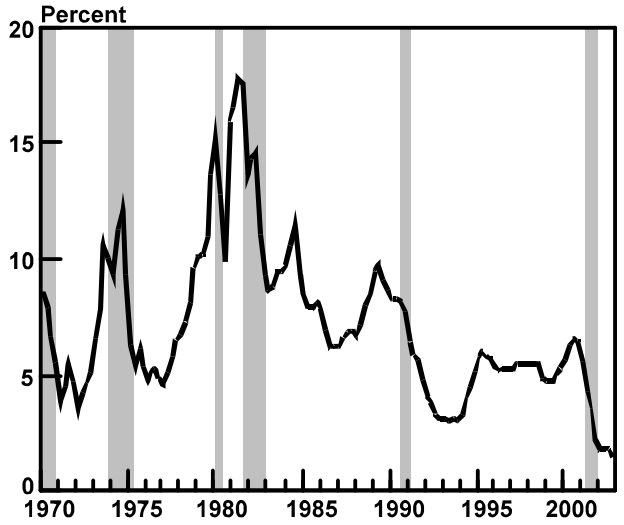
Financial Market Conditions

The Federal Reserve has eased monetary policy aggressively since the beginning of 2001, including cutting the federal funds rate by 0.5 percentage points in November 2002 (*see Figure 2-2*). Nevertheless, overall conditions in financial markets have not been conducive to economic growth. The plunge in stock values last year has substantially reduced household wealth and at the same time has raised businesses' cost of capital. Meanwhile, overall interest rates on corporate bonds have not fallen in tandem with rates on long-term Treasury securities because investors continue to perceive businesses as having a high risk of default. That perception has also caused banks to keep loan standards tight for many corporate borrowers. Those standards, along with weak demand for loans, have contributed to a relatively large drop in bank loans to businesses, even though the banking system is in good shape.

One way to assess the impact on the economy of overall conditions in financial markets is to use an index—such as the one calculated by Macroeconomic Advisers (MA), a private forecasting firm—that combines the stance of monetary policy with a quantitative assessment of the channels through which that policy operates. MA's index draws on statistical relationships between GDP and financial variables such as interest rates, exchange rates, and measures of the stock market. It suggests that despite the Federal Reserve's policies, financial market conditions deteriorated sharply in 2002 (*see Figure 2-3*). The stimulative effect of the decline in short-term interest rates has been more than counteracted by the drop in the stock

Figure 2-2.

The Federal Funds Interest Rate

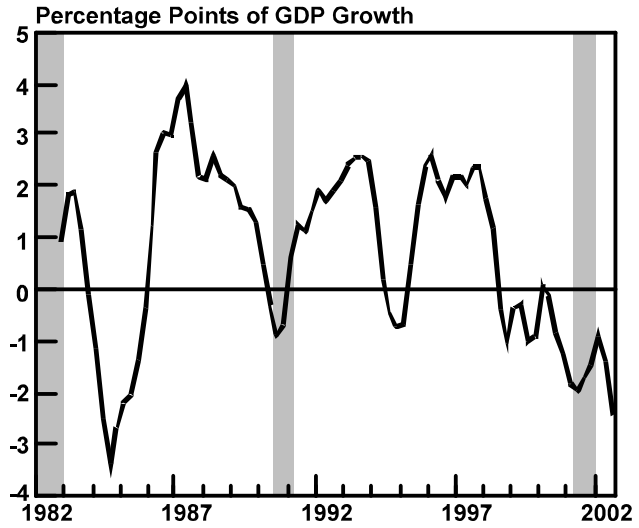


Sources: Congressional Budget Office; Federal Reserve Board.

Note: The federal funds rate is the interest rate that banks charge for overnight loans.

Figure 2-3.

An Index of Monetary and Financial Conditions



Sources: Congressional Budget Office; Macroeconomic Advisers, LLC.

Note: The index measures how financial variables such as interest rates, exchange rates, and the stock market affect the growth rate of real (inflation-adjusted) GDP.

market and the still-elevated interest rates on corporate bonds, especially for riskier companies.

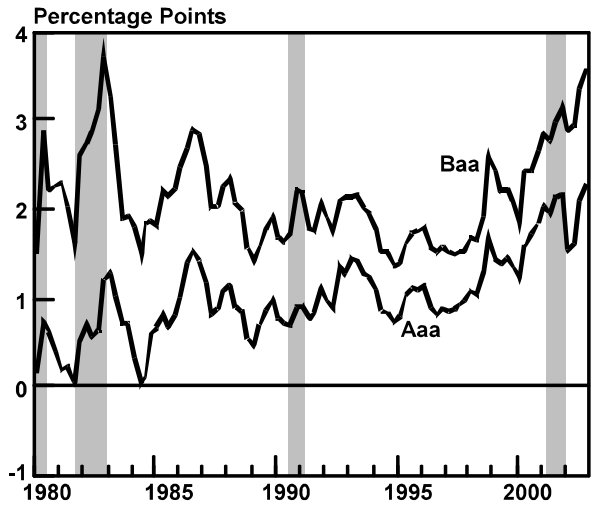
Although the Federal Reserve acted quickly and aggressively to bolster the economy in 2001—before the recession was generally acknowledged—by early in 2002 its rate-cutting cycle appeared to have ended. The March 2002 statement of the Federal Open Market Committee (FOMC) noted that with a recovery under way, risks to its twin goals of price stability and sustainable economic growth had become balanced. By the committee's August meeting, however, the recovery seemed to be in danger of stalling, and the FOMC shifted back toward the view that risks were more heavily weighted toward economic weakness than toward inflation. That shift was followed by a cut in the target federal funds rate (to 1.25 percent) in early November, when the FOMC cited "greater uncertainty, in part attributable to heightened geopolitical risks, . . . currently inhibiting spending, production, and employment." The FOMC suggested that after the November cut, risks were once again in balance; as of mid-January, financial markets believe that further rate reductions are unlikely.

The stimulative effect of that monetary policy has been partly offset by a moribund stock market. The market typically rises at the beginning of a recovery, but the broad-based Standard & Poor's 500 index fell by 23 percent last year—the third consecutive year of decline. Analysts believe that decline was caused not only by uncertainty about the viability of the recovery but also by new concerns about corporate governance and the integrity of corporate earnings reports.

The corporate bond market has also counterbalanced some of the stimulative impact of monetary policy, as rates on corporate bonds have fallen less than interest rates on Treasury bonds of comparable maturity. In fact, the spread between interest rates on Treasury bonds and rates on corporate bonds—including those of investment grade—has increased to levels not seen since the early to mid-1980s (*see Figure 2-4*). The bond market is still plagued by the lingering effects of the late 1990s boom and its aftermath, when a number of once-high-flying firms (such as Enron and WorldCom) wound up defaulting. Through the end of 2002, credit-rating firms continued to issue more downgrades than upgrades. That

Figure 2-4.

Interest Rate Spreads on Corporate Bonds



Sources: Congressional Budget Office; Federal Reserve Board.

Note: These spreads measure the difference between interest rates on corporate bonds with an Aaa or Baa rating and interest rates on 10-year Treasury notes. The higher the spread, the riskier that investors believe corporate bonds to be.

situation, along with the perception that default risks are still high, is keeping the spread between interest rates wide, in contrast to the marked narrowing that typically occurs during the early stages of a recovery. Although conditions in the bond market appear to be stabilizing, any improvement in that market remains tentative, hampered by uncertainty about the durability of the recovery.

Even so, less risky industrial and financial borrowers can still raise funds in credit markets, albeit subject to those wide spreads. The level of net new issues in the domestic bond market (although down by 26 percent from its high in 2001) amounted to nearly $500 billion during the first three quarters of 2002. New debt backed by collateral amounted to another $360 billion, up by 12 percent from a year earlier. Insurance companies and mutual funds have been significant buyers of corporate bonds, and foreigners remain substantial purchasers.

The banking system as a whole is healthy, although lending standards are still tight. Unlike in the early 1990s, few banks face difficulties from inadequate capitalization. In fact, bank capitalization has improved since the start of the recession. Nevertheless, banks have tightened their standards and terms of lending in the face of heightened uncertainty about the economy. Consequently, overall bank lending has grown at a tepid pace—one that is characteristic of recessions and early recoveries rather than expansions.

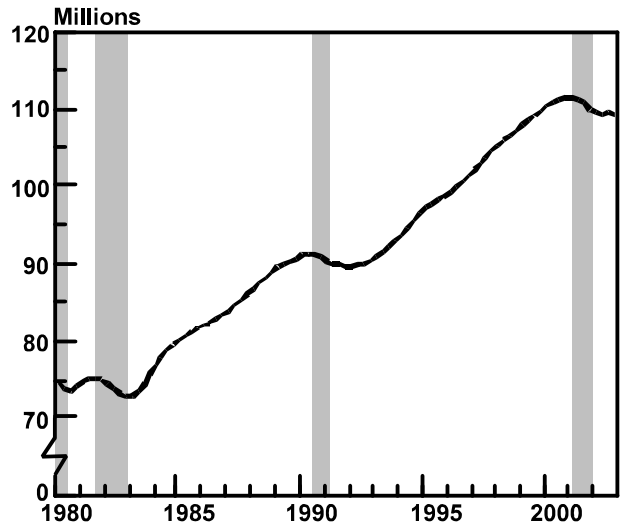
The Household Sector

Spending by households held up well last year despite the continued drop in the stock market. Real personal consumption expenditures rose at an average annual rate of 3 percent during the first three quarters of 2002, only about half a percentage point less than the average growth rate during the post-World War II period. (Those expenditures rose at a slightly higher rate, 3.1 percent, excluding spending on motor vehicles and parts.) In the fourth quarter of 2002, nominal retail and food-service sales grew by only 1.2 percent overall—but by a stronger 4.4 percent excluding motor vehicles and parts.[1] Both new and existing home sales reached record highs in 2002.

1. Data on real personal consumption expenditures for the fourth quarter of 2002 were not available when this report went to press.

Figure 2-5.

Employment in the Private Nonfarm Sector



Sources: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

Household spending last year was bolstered by strong gains in disposable income, rising home values, near-record-low mortgage rates, and sales incentives for motor vehicles. Moderate growth in wages and salaries supported the growth of disposable income, which received a sharp boost from lower income tax payments. The continued rise in home values in many areas, combined with low mortgage interest rates, encouraged homeowners to refinance their mortgages to reduce their interest costs. Many homeowners also took out some equity from their homes when they refinanced so they could spend more on consumer goods and home improvements or repay other debts. Particularly attractive sales incentives boosted automobile purchases at the end of 2002. Strong growth in household borrowing, despite the opportunity to reduce debt-service burdens through refinancing, led to a slight deterioration in the financial health of households last year.

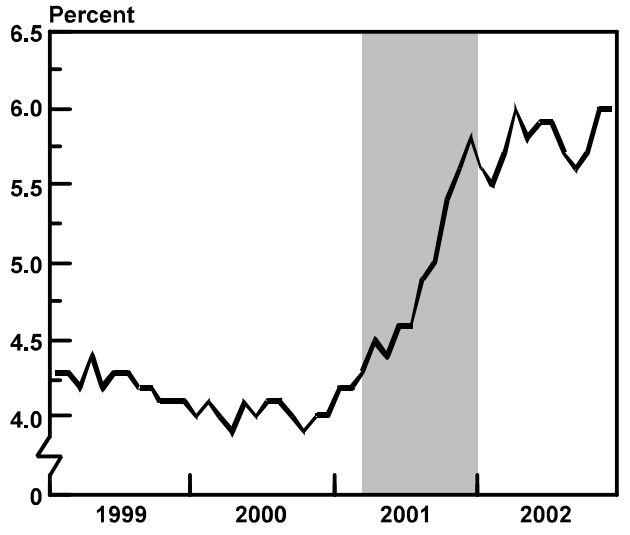
Employment and Income. A slight decline in employment was the reason that wages and salaries grew only moderately last year. Private nonfarm payroll employment decreased by 0.4 percent (or 438,000) between December 2001 and December 2002, despite the growth in real output (*see Figure 2-5*). Although employment appeared

to stabilize during the middle of 2002, it began declining again, with a net 189,000 jobs lost in November and December. The manufacturing sector, which accounted for much of the total employment loss, continued to shed jobs at the end of last year, albeit at a slower pace than during the recession. Manufacturing employment looked poised for recovery in the spring of 2002, as the average workweek rose from its low of late 2001 and the pace of job loss slowed. After that, however, the gains in average weekly manufacturing hours disappeared, and the rate of job loss quickened. The temporary-help industry exhibited modest increases throughout the spring and summer of 2002, but they mostly evaporated late in the year. Employment in services (excluding temporary help) has resumed growing, but at a pace that is slower than typically occurs during a robust recovery.

Despite a choppy monthly pattern, the broad movement in the unemployment rate reflects the weak employment picture. That rate reached a cyclical high of 6.0 percent in April 2002, up from an average of just 4.0 percent in 2000 (*see Figure 2-6*). The unemployment rate subsequently declined to 5.6 percent before climbing back to 6.0 percent at the end of 2002.

Figure 2-6.

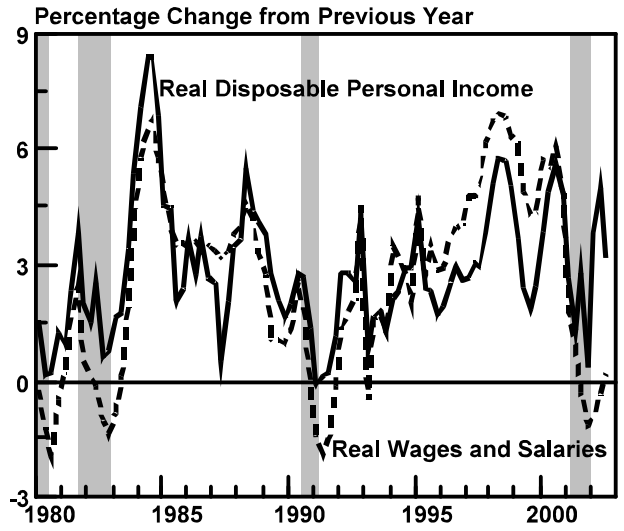
Civilian Unemployment Rate



Sources: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

Figure 2-7.

Growth in Disposable Income



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

In spite of the decline in employment, real wage and salary income has begun increasing, offering modest support for household spending (*see Figure 2-7*). Wages and salaries in the private sector rose at an annual rate of 3.1 percent in the second quarter of 2002 and 3.7 percent in the third quarter; they appear to have risen at a 3 percent to 4 percent rate in the fourth quarter. Because productivity is growing rapidly, employers have been able to increase workers' real hourly wages without hampering profits. That wage growth has outstripped price increases (consumer price inflation is running in the 2 percent to 2.5 percent range), which has allowed for a modest recovery in households' purchasing power.

In addition to higher wages and salaries, lower tax payments substantially augmented the growth of disposable income and supported consumer spending in late 2001 and 2002. Most households received tax rebates in the third quarter of 2001 (up to $600 for joint tax returns). At the same time, a decline of 1 percentage point in tax rates for people in the 28 percent and higher brackets went into effect. Beginning in January 2002, rates of withholding from paychecks were adjusted to take into account the new 10 percent bracket. Those various tax cuts reduced tax payments by about $67 billion in calendar year 2002. The amount of taxes owed by households fell sig-

nificantly more than that, however, because of the weak economy, reduced realizations of stock options and capital gains, and fewer people in the highest tax brackets.

In all, real disposable personal income rose at an annual rate of 7.0 percent between the fourth quarter of 2001 and the third quarter of 2002—a stronger pace than in most past recoveries. More than half of that growth resulted from lower tax payments rather than higher pretax income. Unless lawmakers reach agreement on current proposals for additional fiscal stimulus, tax cuts will not provide further stimulus this year. In that case, additional increases in disposable income will have to come mainly from improved labor market conditions and wage gains.

Household Net Wealth. The continued drop in the stock market further eroded the net wealth of households last year (*see Figure 2-8*). Between the end of 2001 and the third quarter of 2002 (the latest data available), net household wealth dropped by $2.8 trillion because of the decline in stock prices. That decline probably reduced nominal consumer spending by around $100 billion, or slightly less than 1½ percent. Given the small rise in the stock market at the end of 2002, it seems likely that net wealth did not deteriorate further in the fourth quarter.

Thus far, the personal saving rate has not responded noticeably to last year's drop in net wealth, and the possibility exists of a sharp rise in the saving rate (and a concomitant decrease in consumer spending), which would reduce economic growth. That risk is not included in CBO's forecast (*see Box 2-2*).

The effect of falling stock prices on household wealth has been counteracted, to a limited degree, by rising housing prices. In the third quarter of 2002, prices of single-family homes were 6.2 percent higher than in the same quarter a year earlier, according to the Office of Federal Housing Enterprise Oversight. Those high housing prices have combined with low interest rates to trigger a boom in mortgage refinancing. Refinancing activity last year surpassed the record pace of 2001 by 37 percent. When homeowners refinance mortgages, many of them convert some of their accumulated housing equity into cash. Survey data indicate that roughly half of those proceeds are typically used for either consumer spending or home improvements. Thus, the refinancing boom probably contributed a few tenths of a percentage point to last year's growth in personal consumption spending.

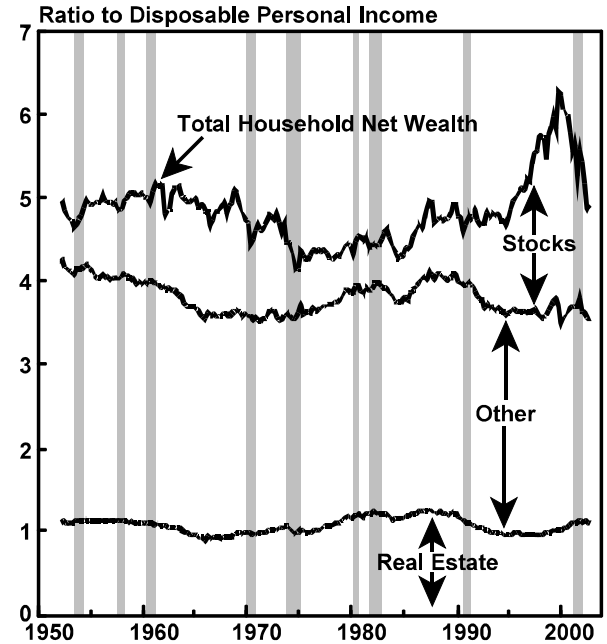
The Financial Health of the Household Sector. Consumers' financial health has eroded slightly, and households are more indebted than they were before the 2001 recession. As a result, the household sector is vulnerable to financial problems should the growth of income falter.

Real household debt has risen much faster than is normally seen during a recession and early recovery. The growth of real mortgage debt continued to accelerate in 2002, to its fastest pace since 1990, and consumer credit grew a bit more slowly than disposable personal income. Because interest rates have stayed low, the rapid rise in debt has not increased households' debt-service burden markedly. But that burden has not fallen, as it typically does during and immediately after a recession.

The rate of delinquencies on conventional mortgages has increased in the past few years (although it is lower than in the 1981-1982 recession and about the same as during the 1990-1991 recession). The delinquency rate is especially large on higher-risk FHA loans (*see Figure 2-9*).

Figure 2-8.

Household Net Wealth



Sources: Congressional Budget Office; Federal Reserve Board.

Box 2-2.

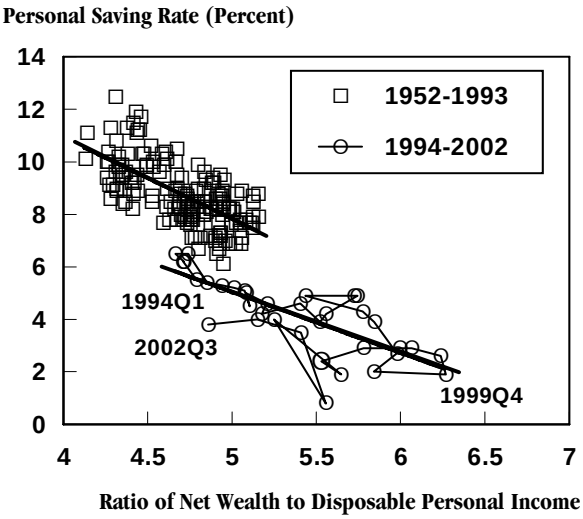
The Wealth Effect and Personal Saving

The unusually low rate of personal saving in recent years prompts concern about the strength of consumer spending in 2003. Between 1994 and 1999, the personal saving rate (personal saving as a percentage of disposable income) averaged only 4.7 percent, considerably below the average of 8.7 percent before 1994. Economists believe that a key reason for that low rate was a tremendous increase in stock prices and thus in consumers' net wealth. Between 1993 and 1999, consumers' net wealth rose by an astounding $18.3 trillion, and the ratio of net wealth to disposable personal income grew from 4.9 to 6.4—the highest level since at least 1952. That sharp rise in wealth allowed consumers to increase their spending faster than their income rose, causing the personal saving rate to plummet—from 7.1 percent in 1993 to 2.6 percent in 1999. Since 1999, by contrast, consumer net wealth has fallen markedly, and the ratio of net wealth to income has declined nearly to its value in 1993. But the personal saving rate has not risen to anywhere near its 1993 level. If consumers curtail their spending in an attempt to raise their saving rate to levels typically seen before the 1990s, they could undermine the economic recovery.

Current data, however, suggest that the personal saving rate may not return to the levels that prevailed before the 1990s. The reason is that the relationship between the personal saving rate and the ratio of consumers' net wealth to disposable income seems to have undergone a fundamental shift. That change is visible in the figure at right. The higher group of data points shows the relationship between the saving rate and the wealth-to-income ratio from 1952 to 1993; the lower set of points shows that relationship from 1994 to 2002. Trend lines drawn through the two groups of data points illustrate the shift. Although the wealth-to-income ratio in the third quarter of 2002 (4.9, the latest figure available) is within the 1952-1993 range of values, the personal saving rate in that quarter (3.8 percent) is below even the post-1993 trend.

Why the relationship shifted in 1994 is unclear. One possibility is that the change is a statistical artifact that will disappear in future data revisions. In recent years, the Department of Commerce's Bureau of Economic Analysis has frequently revised the saving rate upward on the basis of more complete data and other changes when it annually revises the national income and product accounts.

Personal Saving Rate Versus Net Wealth



Sources: Department of Commerce, Bureau of Economic Analysis; Federal Reserve Board.

Another possibility is that changes in the markets for consumer credit and mortgage loans have made it easier and cheaper for consumers to borrow. As a consequence, consumers do not need to save as much in advance for purchases and for down payments on homes.

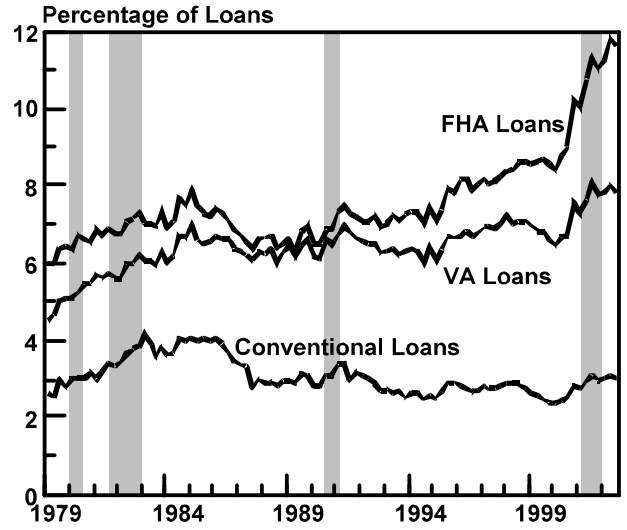
The shift does not appear to depend on the definition of the personal saving rate. The saving rate used in the figure is the measure from the national income and product accounts. It considers saving to be all income from current production that is not spent on consumer goods and services, interest paid by persons, and personal transfer payments to the rest of the world. A different measure comes from the flow-of-funds accounts maintained by the Federal Reserve Board.[1] That measure defines personal saving as the household sector's net acquisition of financial assets plus the net investment in tangible assets minus the net increase in liabilities. A shift is apparent using that measure. Other measures of personal saving do not appear to explain the shift either.[2]

1. Board of Governors of the Federal Reserve System, *Flow of Funds Accounts of the United States* (December 5, 2002).

2. Examples of other measures are described in Maria G. Perozek and Marshall B. Reinsdorf, "Alternative Measures of Personal Saving," *Survey of Current Business* (April 2002), pp. 13-24.

Figure 2-9.

Mortgage Delinquency Rates



Sources: Congressional Budget Office; Mortgage Bankers Association.

Notes: FHA = Federal Housing Administration; VA = Department of Veterans Affairs.

However, mortgage delinquencies and foreclosures appear to be lagging indicators, so they may peak soon if the economy continues to recover. Indeed, mortgage delinquency rates edged down in the third quarter of 2002.

The delinquency rate on a broad range of consumer loans at commercial banks, by contrast, is lower than it was at the start of the 2001 recession. That relatively better rate may reflect the fact that households used some of the proceeds from refinancing mortgages to pay down consumer loans. In addition, banks have kept a tight rein on standards and terms of such loans, helping to minimize delinquencies. Nevertheless, the delinquency rate on credit cards surged in 2001 and remained at a very high level in 2002, suggesting credit problems among some borrowers (*see Figure 2-10*).

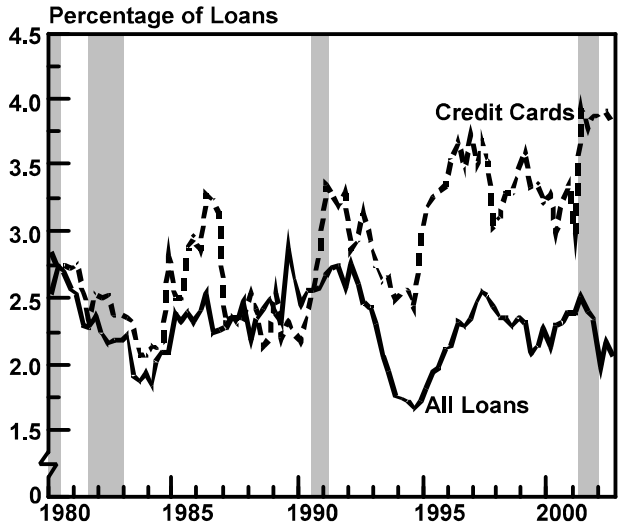
The Housing Market. The market for housing has been a source of strength in this recovery. Real residential investment surged to all-time highs in each of the first three quarters of 2002, and housing starts for the year as a whole were at their highest level since 1986. Moreover, sales of both new and existing single-family homes reached record levels in 2002 (*see Figure 2-11*). Those sales have been fueled by the lowest mortgage rates since the 1960s (*see Figure 2-12*). According to Freddie Mac, late in 2002, interest rates were just above 6 percent for 30-year fixed-rate mortgages, around 5.5 percent for 15-year fixed-rate mortgages, and between 4 percent and 4.25 percent for one-year adjustable-rate mortgages. All of those rates were about a percentage point lower than they were early in 2002.

Several indicators suggest, however, that the housing market may decelerate soon. Nationally, the increase in housing prices has slowed, suggesting lower growth in demand, and prices in some areas have begun to decline. Some analysts suggest that housing prices may have risen by more than the underlying conditions of supply and demand warrant, at least in some metropolitan areas, which means that prices in those areas could fall. In addition, the rise in delinquencies among high-risk borrowers could cause mortgage lenders to tighten credit terms and standards for such borrowers.

Motor Vehicles. Purchases of cars and light trucks have been another important element bolstering consumer spending over the past year. After the terrorist attacks of September 11, 2001, automakers feared that consumers would stop buying major items such as cars. To prevent

Figure 2-10.

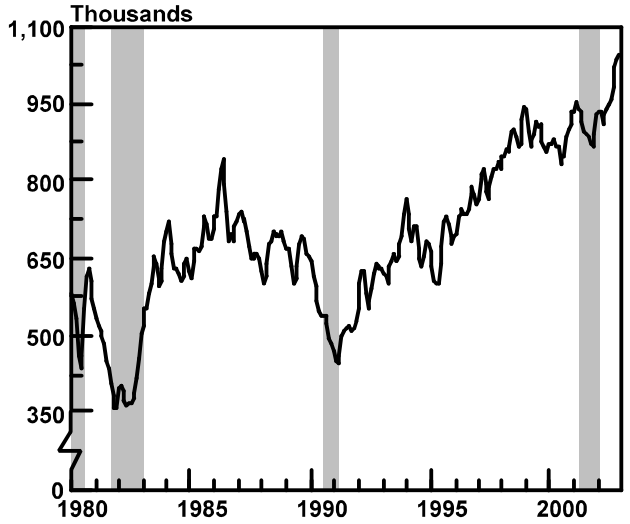
Delinquency Rates on Consumer Loans at Banks



Sources: Congressional Budget Office; American Bankers Association.

Figure 2-11.

Sales of New Homes



Sources: Congressional Budget Office; Department of Commerce, Bureau of Census.

Note: Data are three-month moving averages.

that from happening, General Motors offered its customers zero-interest financing beginning in October 2001; Ford and the Chrysler unit of Daimler-Chrysler quickly matched that offer. As a result, sales of cars and light trucks reached a near-record level that month—an annual rate of 21.1 million vehicles—and remained at high levels throughout most of 2002 (*see Figure 2-13*). Some industry observers fear that those incentives may soon lose much of their impact, but vehicle sales remained strong at the end of 2002.

The Corporate Sector

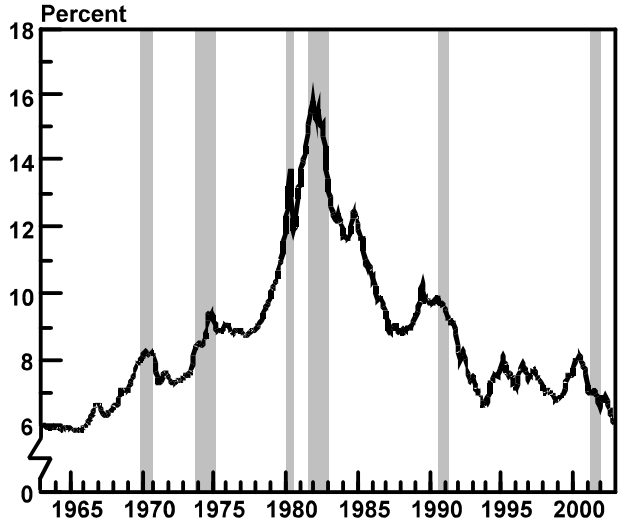
Whereas spending by the household sector has helped the economy recover, weakness in the corporate sector restrained growth last year. Excess capacity, weak corporate profits, the high cost of raising funds for investment in either the stock or bond market, sluggish growth of final sales, and pervasive uncertainty have all inhibited companies from making new investments in plant and equipment, rebuilding inventories, and restoring the growth of employment.

Corporate investment has been on a roller-coaster ride in recent years. It grew explosively during the late 1990s, fueled by rising stock prices, strong growth in demand, and excessive investment in information technology (computers, software, and telecommunications equipment). Real investment in producers' durable equipment and software surged at a rate of 11.6 percent a year, on average, between 1994 and 2000. Although much of that growth came from purchases of computers and software (prompted in part by rapid declines in quality-adjusted computer prices), other investment in producers' durable equipment rose at a healthy pace.

In late 2000, however, investment growth slowed sharply as stock prices fell and businesses began to pull back from investing in information technology. In 2001, investment in overall producers' durable equipment and software declined by 6.4 percent. Investment in nonresidential structures (which had stayed strong through the summer of 2000 before declining in early 2001) plummeted at an annual rate of 30 percent in the fourth quarter of 2001 and continued to fall at double-digit rates throughout 2002. Today, equipment investment appears to be recovering modestly, mainly because businesses have eliminated much of the overhang of excess investment in information technology built up during the boom years. Nonetheless, business fixed investment is unlikely to return to the high

Figure 2-12.

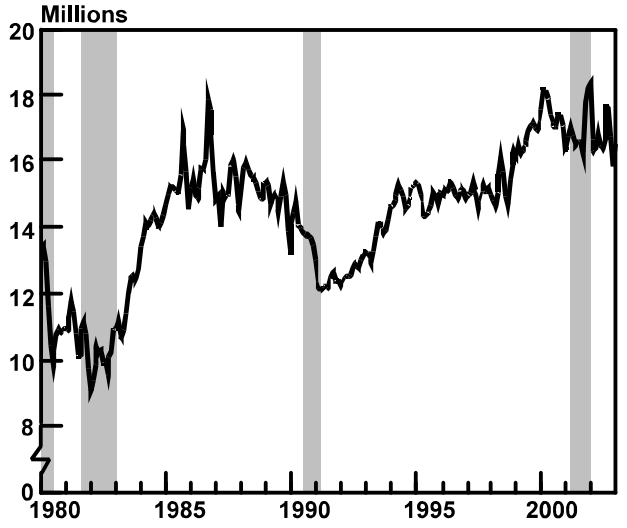
Mortgage Interest Rates for Existing Homes



Sources: Congressional Budget Office; Federal Housing Finance Board.

Figure 2-13.

Sales of Cars and Light Trucks



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Note: Data are three-month moving averages of annual rates.

share of GDP that it constituted in the late 1990s, because the factors that caused that share are not expected to recur on a sustained basis.

An important factor inhibiting a revival of investment so far is excess capacity. The rate of capacity utilization in manufacturing plunged from 82.2 percent in the first half of 2000 to 73.4 percent in the fourth quarter of 2001, driven by a decline in demand for goods (*see Figure 2-14*). That drop left the capacity utilization rate considerably lower than during the 1990-1991 recession (when it fell only to around 78 percent), though not as low as during the 1973-1975 and 1981-1982 recessions.

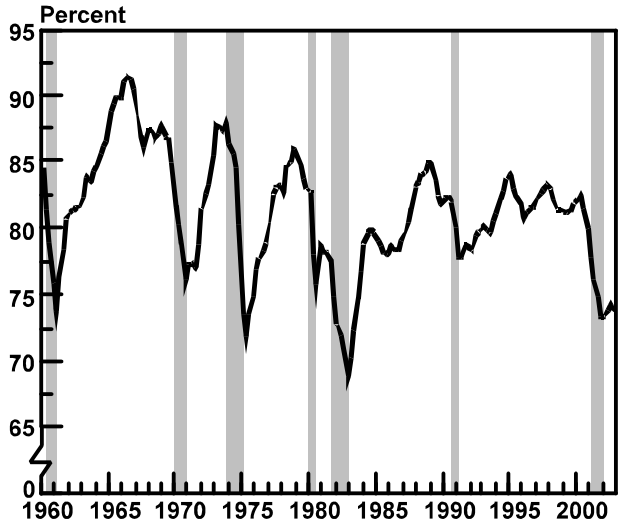
Confronted with so much excess capacity, businesses not only delayed expanding their capacity but did not fully replace existing capacity as it depreciated. Robust growth of productivity during late 2001 and early 2002 further reduced the need to replace depreciating capacity. During 2002, modest growth in demand encouraged businesses to replace a bit more of their depreciating capacity, exemplified by the rebound in computer purchases. However, any investment aimed at expansion awaits further improvement in demand. Investment in structures is likely to be the last part of corporate investment to recover, given elevated vacancy rates for offices.

Corporate profits have begun growing again, but weakly. Their performance so far in this recovery sharply contrasts with the strong rebound in profits typical of most recoveries. The current weakness reflects a slow recovery and declining output prices in much of the nonfinancial corporate sector. If that subpar recovery continues, the growth of profits is likely to stay unusually slow for several quarters, and corporate profits as a share of GDP will remain low until the middle of this year or later.

Despite the Federal Reserve's accommodative monetary policy, businesses' cost of capital has actually risen. That rise stems mainly from declines in stock prices, which make it more difficult and costly to pay for investment by issuing stock. In addition, increasing spreads between interest rates on most newly issued corporate bonds and rates on Treasury bonds of similar maturities have offset some of the impact of the Federal Reserve's actions on the cost of debt (*see Figure 2-4 on page 29*). With many "dot-com" firms defaulting after the technology boom faded, more-speculative ventures now have trouble getting funded.

Figure 2-14.

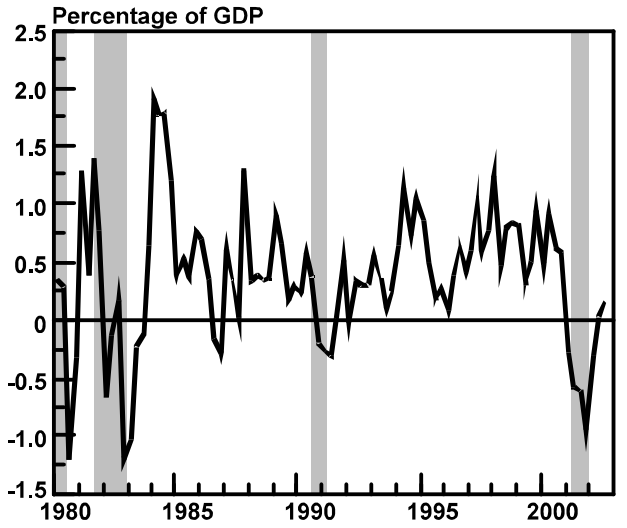
The Rate of Capacity Utilization in Manufacturing



Sources: Congressional Budget Office; Federal Reserve Board.

Figure 2-15.

Business Investment in Inventory



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

A provision of the March 2002 economic stimulus law has temporarily reduced the cost of capital but has not offset the impact of declining stock prices. That provision allows firms to partially expense some of their new investment for tax purposes (thus augmenting the tax benefits from existing rules, which already allow tax depreciation that is usually much more favorable than the estimated value of true economic depreciation). The new provision was made retroactive to September 11, 2001, and is scheduled to expire in September 2004. CBO estimates that it will add 1 percentage point to the growth of business fixed investment, on average, in 2002 and 2003. The effect could be much greater in 2004 as firms speed up planned investment projects to take advantage of the accelerated depreciation allowance before it expires.

After drawing down inventories rapidly in 2001, businesses have now cautiously begun to rebuild them (*see Figure 2-15*). The average ratio of inventories to sales has fallen over the past 20 years as manufacturers and retailers have adopted better inventory-management techniques. Those ratios typically rise shortly before and during a recession (as falling demand leaves producers with more inventory than they had planned) and decline when the economy begins to recover. The ratio rose only slightly in 2000, however, and then fell sharply in late 2001 and early 2002. Even allowing for the historical trend and for continuing improvements in inventory management, inventories currently appear to be lower than most firms desire. Consequently, CBO expects inventory rebuilding to at least keep pace with any upturn in sales.

The International Situation

Although foreign economies will grow faster this year than in 2002, on average, the outlook for growth overseas has dimmed since last summer, when CBO's previous economic forecast was published. The near-term outlook points toward only weak recoveries in Japan and Germany, and many South American economies continue to battle the fallout from financial crises. Just a handful of the United States' major trading partners—namely, Canada, South Korea, and China—have economies that are growing at healthy rates.

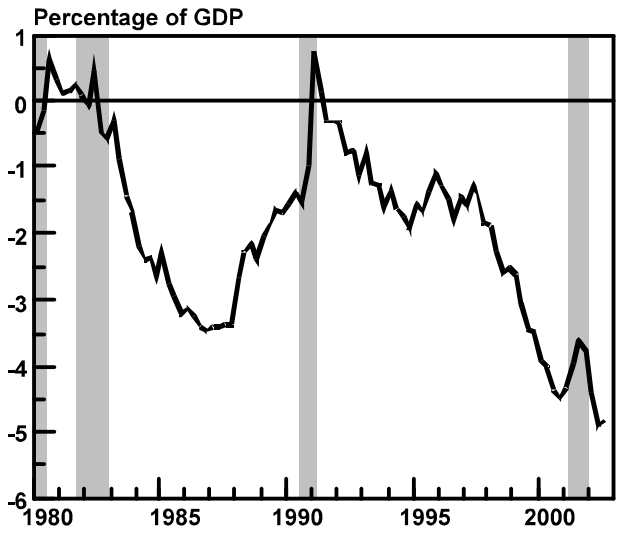
Because of weaker foreign growth last year and the relatively high exchange value of the dollar at the beginning of that year, the U.S. current-account balance fell sharply in 2002 (*see Figure 2-16*).[2] The dollar also trended downward, falling from a high of 1.16 euros to the dollar to about 0.98 in December 2002. According to the Federal Reserve, the dollar fell by 7 percent in 2002 against a trade-weighted basket of major currencies.

Global Economic Conditions. Economic recoveries around the world have largely stalled since last summer. Growth in the euro countries has been slow, and that weakness is generally expected to continue. As unemployment in those nations edges higher, consumers are reining in spending. Investment there is hampered by low domestic demand, excess capacity, stock market weakness, and heightened global uncertainties. The growth of exports is likely to be curtailed by the euro's rise against the dollar late in 2002. The euro countries with the two largest

2. The current-account balance is the net revenues that arise from a country's international sales and purchases of goods and services plus its net international transfers (public or private gifts or donations) and net factor income (primarily capital income from foreign property owned by residents of that country minus capital income from domestic property owned by nonresidents). The current-account balance differs from net exports in that it includes international transfers and net factor income.

Figure 2-16.

The Current-Account Balance



Sources: Congressional Budget Office; Department of Commerce, Bureau of the Census.

economies—Germany and France—have budget deficits that are already near or above the limit (3 percent of GDP) set by the European Union's growth and stability pact; thus, they have little room for fiscal stimulus. In December, the European Central Bank cut its interest rate target by 0.5 percentage points after keeping that target at 3.25 percent throughout 2002. Although the cut will help bolster the region's economy to some extent, it will not be enough by itself to produce a significant acceleration in growth.

The Japanese economy had staged a rebound since the first quarter of 2002 but is again showing signs of weakening. It continues to be depressed by low demand for investment, ballooning government debt, massive nonperforming bank loans, and entrenched deflation. The plight of the economy has apparently prompted the Japanese government to renew its efforts to tackle the deepening banking crisis, but whether those efforts will be sufficient to revive economic growth is unclear.

Conditions in the rest of the world are mixed. The economic turmoil in South America has recently stabilized, but the region remains vulnerable to shocks. Argentina's economy has been in recession for more than four years and is still having difficulty gaining access to external credit. Brazil continues to face an uphill battle to tame inflation, control its budget deficit, and maintain investor confidence. One bright spot for the world economy has been the performance of much of East Asia (outside Japan). Its strong growth last year reflected healthy consumer spending and higher exports. Closer to home, Canada is clearly the best-performing economy among the G-7 nations, with surging consumer spending drawing strength from a healthy labor market and a buoyant housing market. And although Mexico's economy was hit harder than Canada's by the U.S. economic downturn, it has avoided the crisis that has engulfed much of South America.

The U.S. Exchange Rate. Last year's decline in the value of the dollar is a helpful development toward resolving the growing imbalance of the U.S. current-account deficit. For years, many analysts have been concerned about the implications of the growth in that deficit, which now amounts to almost 5 percent of GDP. At that level, financing the current account requires that the United States attract a large net inflow of capital to avoid a sharp decline in the dollar. If investors decided to pull back their investment in dollars suddenly, the currency's value would fall sharply, disrupting financial stability and economic growth.

Although a plunge in value remains a risk, the dollar is unlikely to collapse, in CBO's view, for at least four reasons. First, investment opportunities are still better in the United States than in most other developed countries, as reflected in the stronger U.S. output and productivity growth. Second, some foreign governments may prefer to keep their currencies low relative to the dollar because they rely on exports to the United States to stimulate economic growth. Third, the outflow of interest, profits, and dividends on net foreign investment in the United States continues to represent a negligible fraction of GDP. And finally, the dollar's status as a reserve currency should dampen abrupt changes in its value. Thus, CBO expects that the dollar will continue to decline in an orderly rather than an abrupt fashion. Over the next few years, a combination of gradual depreciation in the dollar, moderate U.S. growth, and a gradual acceleration in the growth of domestic demand overseas should keep the U.S. current-account deficit from growing much more as a share of GDP.

Government Spending

Spending by both the federal government and state and local governments helped buoy the economy in 2002. But the growth of state and local spending is likely to slow dramatically this year, and unless current law changes significantly, the growth of federal spending will ease.

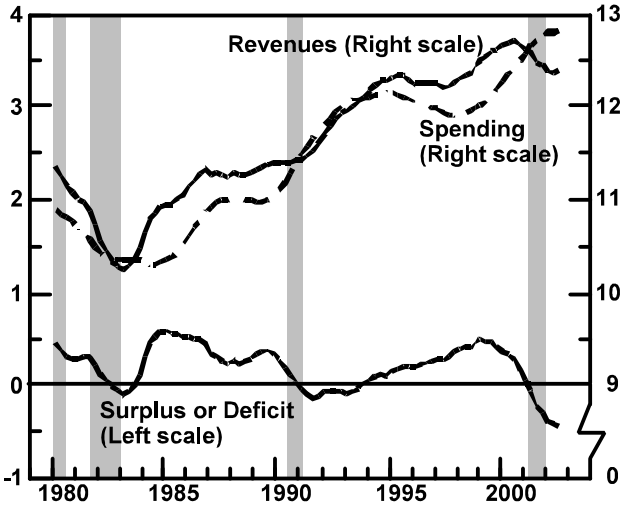
Federal spending—measured in the national income and product accounts (NIPAs) as real federal government consumption and investment expenditures excluding depreciation—was more than 9 percent higher in the third quarter of 2002 than in the same period a year earlier. Defense spending accounted for the bulk of that increase. Under current law, however, the growth of federal spending is slated to slow during both 2003 and 2004. (For more details on the outlook for federal spending, see Chapter 4.)

The fiscal positions of states and localities continued to worsen last year because of the weak stock market and slow recovery from the 2001 recession (*see Figure 2-17*). Their total deficit (according to the NIPA measure, which includes both operating and capital budgets) is the largest as a share of potential GDP that it has been since World War II. The growth of total state and local spending for transfer payments, wages and salaries, and other operating costs as well as for capital improvement projects has slowed. However, revenues, which had faltered even before the recession, weakened much more in 2001 and 2002 than spending did, widening deficits. State and local revenues dropped for much the same reason that federal revenues fell—the weakening economy, the decline in the stock market, and reductions in tax rates—even though states and localities depend on income tax revenues less than the federal government does.

Figure 2-17.

The Fiscal Positions of State and Local Governments

(Percentage of Potential GDP)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

The various actions that state and local governments are taking to address their budget deficits will restrain growth this year and next year. Some freezes or cuts in spending and increases in taxes have already been put in place, and others are likely during the rest of 2003. Most states have fiscal years that begin in July, so some of the restraint may not be felt until the second half of this year. Overall, state and local spending (excluding transfer payments) is likely to grow by only 1 percent this year in real terms, in contrast to the 2 percent growth seen in 2002 and the 4 percent to 6 percent growth that occurred during the 1998-2001 period.

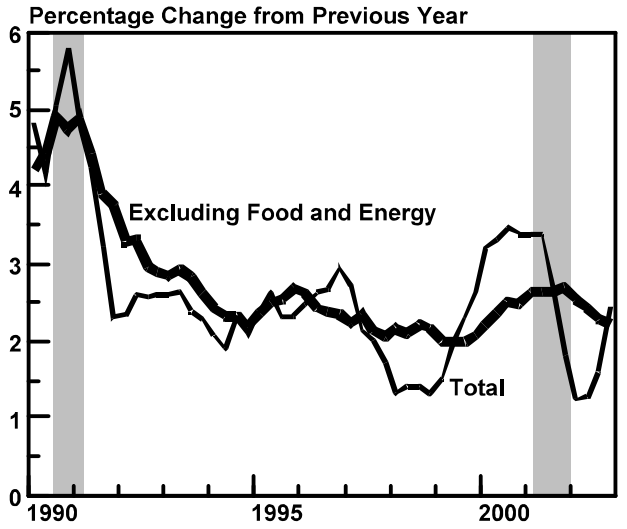
Inflation

Excluding energy and food prices (which are often volatile), core consumer price inflation, as measured by the CPI-U, steadily eased last year (*see Figure 2-18*). Other core measures of prices—the price index for personal consumption expenditures and the GDP price index excluding food and energy—also grew more slowly.

The immediate cause of that lower inflation was a slowdown in the growth of demand during the recession. However, the stage was set by several other factors: the massive expansion of productive capacity that occurred during the late 1990s, both in the United States and abroad; steady improvements in labor productivity even in the face of the recent slowdown; and the low-inflation policy of the Federal Reserve. Various measures of excess capacity—capacity utilization in manufacturing, the unemployment rate, commodity prices—indicate that the U.S. and world economy can more than fill demand at current prices and that excess capacity is likely to continue holding inflation down this year.

Figure 2-18.

Inflation in the Consumer Price Index



Sources: Congressional Budget Office; Department of Commerce, Bureau of Labor Statistics.

Prices of goods and services have moved in opposite directions in recent years. The core index for goods prices in the CPI-U fell by 1.5 percent over the past 12 months —the first such decline since the 1960-1961 recession. In contrast, the core index for services prices rose by 3.4 percent. That growth was dominated by what the Bureau of Labor Statistics calls rent of shelter, which increased by 3.0 percent over the past year, and by the costs of medical care and tuition, which grew by about 5 percent and 6 percent, respectively.[3] Rent of shelter alone accounts for some 40 percent of the core measure of consumer price inflation, and the behavior of rental costs has buoyed measured inflation. If such rent is excluded from the CPI-U along with food and energy, prices grew by only about 1 percent in 2002.

CBO's Economic Forecast for 2003 and 2004

CBO forecasts that the economic recovery will continue at a moderate pace this year and next year, with little inflationary pressure (*see Table 2-2*). That forecast reflects CBO's view that consumer spending will grow modestly and that business investment will pick up significantly during the second half of 2003. In that view, stimulus from the Federal Reserve's accommodative monetary policy will help keep the recovery going.

That near-term outlook contains a significant amount of uncertainty, however, because of lingering aftereffects from the investment bubble of the late 1990s and heightened uncertainty about geopolitical events. Thus, outcomes better or worse than CBO foresees for the next two years cannot be ruled out. Changes in the confidence of consumers, businesses, and investors could affect the near-term outlook, as could growth in foreign economies that is stronger or weaker than anticipated. For example, it remains unclear when businesses will feel that they can begin to add capacity. Beyond its direct effect on investment, business confidence is likely to play an important role in the recovery of employment and, hence, household income. One factor that may be affecting confidence is

Table 2-2.

CBO's Economic Forecast for 2003 and 2004

	Estimated 2002	Forecast 2003	Forecast 2004
Fourth Quarter to Fourth Quarter (Percentage change)			
Nominal GDP	4.2	4.7	5.6
Real GDP	2.7	3.0	3.7
GDP Price Index	1.4	1.6	1.9
Consumer Price Index[a]			
Overall	2.3	2.1	2.2
Excluding food and energy	2.1	2.0	2.2
Calendar Year Average			
Real GDP (Percentage change)	2.4	2.5	3.6
Unemployment Rate (Percent)	5.8	5.9	5.7
Three-Month Treasury Bill Rate (Percent)	1.6	1.4	3.5
Ten-Year Treasury Note Rate (Percent)	4.6	4.4	5.2

Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

a. The consumer price index for all urban consumers.

3. The rent of shelter category comprises not only rental payments for apartments and other housing but also the implicit rental price of owner-occupied housing, payments for lodging away from home, and the cost of tenants' and household insurance.

the ongoing risk of further terrorist acts and of war. (Risks of war are discussed in more detail in Chapter 5.)

Real GDP and Employment

Consumer spending is expected to rise at a steady but moderate rate over the next two years, consistent with the growth of disposable income. Several factors are restraining the growth of consumer spending: the waning impact of sales incentives on purchases of cars and light trucks, the drop in the stock market during the second half of 2002, and a smaller expected boost from households' obtaining additional cash through mortgage refinancing. Consumers have already spent a considerable amount on automobiles, calling into question their demand for additional purchases over the next year. The drop in stock prices last year erased more than $2 trillion from household wealth, and even though stocks rebounded slightly from their summer lows by the end of 2002, the value of household stock portfolios is still below the level of last June. Mortgage refinancing, which achieved record levels in 2002, is unlikely to repeat that performance this year, particularly because mortgage interest rates are likely to rise.

Business investment will be the fastest growing component of GDP this year, CBO forecasts. However, such investment will probably not return to the rapid pace of the late 1990s because financial markets have a more tempered view of growth prospects, particularly for the information technology industry. Businesses have let their inventories shrink in the face of financing difficulties and uncertainty about the strength of demand. If, however, signs of firmer demand appear this year, businesses are likely to restock their shelves at a faster pace. Similarly, companies cut back investment in 2001 and 2002 to bring capacity more in line with softening demand. As real growth of demand picks up in 2003 and 2004, investment, especially in new equipment and software, will also bounce back. Spending on business structures has yet to recover, in light of still-high office vacancy rates, and may not do so until late this year.

CBO's forecast also assumes that the U.S. current-account balance will continue to deteriorate as a share of GDP in 2003 before turning around modestly next year. That pattern results mainly from the expectation that the United States will grow faster than its major trading partners this year. CBO also expects the dollar to weaken slightly through the end of 2004, which is likely to prompt some switching of demand from foreign goods and services to U.S. ones.

CBO's forecast for the growth of GDP implies a slow but steady increase in employment this year and a slightly faster increase next year. That pace of employment growth will probably not be sufficient to lower the unemployment rate this year, but it should prevent that rate from rising significantly. As a result, CBO forecasts that the unemployment rate will remain close to 6 percent through the middle of 2003 and fall slightly by the end of next year.

Inflation and Interest Rates

CBO's moderate outlook for economic activity suggests little inflationary pressure in 2003 and 2004. Inflation, as measured by the CPI-U, is expected to increase by 2.1 percent this year and by 2.2 percent next year, compared with 2.3 percent growth in 2002. (Excluding food and energy prices, CPI-U inflation will grow by 2.0 percent this year and 2.2 percent in 2004, close to its 2.1 percent rate of last year.) The GDP price index will rise by 1.6 percent this year and 1.9 percent next year.

Underlying that forecast is the assumption that only part of the economy's remaining excess capacity will be eliminated this year, given the modest outlook for growth of demand both in the United States and around the world. Therefore, downward pressure on prices is likely to continue, even though import prices may increase in response to the recent and anticipated declines in the dollar. The risk remains, of course, that oil prices could be much higher or lower than the $26-$30 range assumed in this forecast and that overall inflation could reflect oscillations in oil prices. However, downward pressure on the core rate of inflation would probably persist.

CBO assumes that short-term interest rates will remain at their currently low levels until late this year, when the Federal Reserve is likely to raise its target for the federal funds rate in the face of stronger growth. The interest rate on three-month Treasury bills is forecast to decline from an average of 1.6 percent in 2002 to 1.4 percent this year and then jump to 3.5 percent in 2004. The rate on 10-year Treasury notes is expected to decrease from 4.6 percent in 2002 to 4.4 percent in 2003 and then rise to 5.2 percent next year.

Table 2-3.

Comparison of *Blue Chip's* and CBO's Forecasts for Calendar Years 2003 and 2004

	Estimated 2002	Forecast 2003	Forecast 2004
Nominal GDP (Percentage change)			
Blue Chip high 10		5.4	6.7
Blue Chip consensus		4.5	5.5
CBO	**3.6**	**4.2**	**5.4**
Blue Chip low 10		3.7	4.4
Real GDP (Percentage change)			
Blue Chip high 10		3.4	4.3
Blue Chip consensus		2.8	3.6
CBO	**2.4**	**2.5**	**3.6**
Blue Chip low 10		2.3	3.0
GDP Price Index (Percentage change)			
Blue Chip high 10		2.1	2.5
Blue Chip consensus		1.6	1.9
CBO	**1.1**	**1.6**	**1.7**
Blue Chip low 10		1.1	1.3
Consumer Price Index[a] (Percentage change)			
Blue Chip high 10		2.6	2.7
Blue Chip consensus		2.2	2.3
CBO	**1.6**	**2.3**	**2.2**
Blue Chip low 10		1.7	1.7
Unemployment Rate (Percent)			
Blue Chip high 10		6.2	6.0
Blue Chip consensus		5.9	5.5
CBO	**5.8**	**5.9**	**5.7**
Blue Chip low 10		5.6	5.1
Three-Month Treasury Bill Rate (Percent)			
Blue Chip high 10		1.9	3.9
Blue Chip consensus		1.6	2.9
CBO	**1.6**	**1.4**	**3.5**
Blue Chip low 10		1.2	1.9
Ten-Year Treasury Note Rate (Percent)			
Blue Chip high 10		4.9	6.0
Blue Chip consensus		4.5	5.2
CBO	**4.6**	**4.4**	**5.2**
Blue Chip low 10		4.1	4.5

Sources: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board; Aspen Publishers, Inc., *Blue Chip Economic Indicators* (January 10, 2003).

Note: The *Blue Chip* high 10 is the average of the 10 highest *Blue Chip* forecasts; the *Blue Chip* consensus is the average of the nearly 50 individual *Blue Chip* forecasts; and the *Blue Chip* low 10 is the average of the 10 lowest *Blue Chip* forecasts.

a. The consumer price index for all urban consumers.

A Comparison of Two-Year Forecasts

CBO's current two-year outlook is similar to the latest *Blue Chip* consensus forecast, an average of roughly 50 private-sector forecasts (*see Table 2-3*). CBO's estimate of real GDP growth is slightly lower than the *Blue Chip*'s for 2003 and identical for 2004. CBO expects slightly higher unemployment in 2004 than the *Blue Chip* consensus does. The two forecasts are very similar in their estimates of CPI-U inflation and long-term interest rates; however, CBO expects short-term interest rates to be lower than the *Blue Chip* does in 2003 and higher in 2004.

The Economic Outlook Beyond 2004

CBO projects that real GDP will grow at an average annual rate of 3.0 percent from 2005 through 2013—slightly faster than the growth of potential GDP, which is projected to average 2.9 percent during that period.[4] Real GDP fell by about 0.6 percent during the 2001 recession, and CBO's forecast of moderate growth during 2003 and 2004 leaves real GDP slightly below potential GDP at the end of 2004. Thus, to bring real GDP back to its historical relationship with potential GDP, CBO assumes that real GDP will grow sightly faster than 2.9 percent during the 2005-2013 period.

The current projections for inflation, unemployment, and interest rates after 2004 are quite similar to the ones that CBO published last August (*see Table 2-4*). In those projections, CPI-U inflation averages 2.5 percent a year in the 2005-2012 period, and the unemployment rate declines to 5.2 percent (equal to CBO's estimate of the nonaccelerating inflation rate of unemployment). The interest rate on three-month Treasury bills is projected to average 4.9 percent during the 2005-2012 period and the rate on 10-year Treasury notes to average 5.8 percent.

CBO's projections reflect current law, including the sunset provisions of the Economic Growth and Tax Relief Reconciliation Act of 2001. Under those provisions, tax

4. Potential GDP is defined as the highest level of GDP that could persist for a substantial period without raising the rate of inflation. CBO's procedure for estimating potential GDP is described in *CBO's Method for Estimating Potential Output: An Update* (August 2001).

Table 2-4.

CBO's Current and Previous Economic Projections for Calendar Years 2003 Through 2012

	Estimated	Forecast		Projected Annual Average	
	2002	2003	2004	2005-2008	2009-2012
Nominal GDP (Billions of dollars)					
January 2003	10,443	10,880	11,465	14,154[a]	17,217[b]
August 2002	10,429	10,912	11,484	14,137[a]	17,358[b]
Nominal GDP (Percentage change)					
January 2003	3.6	4.2	5.4	5.4	5.0
August 2002	3.4	4.6	5.2	5.3	5.3
Real GDP (Percentage change)					
January 2003	2.4	2.5	3.6	3.2	2.8
August 2002	2.3	3.0	3.3	3.2	3.1
GDP Price Index (Percentage change)					
January 2003	1.1	1.6	1.7	2.1	2.2
August 2002	1.1	1.6	1.9	2.1	2.1
Consumer Price Index[c] (Percentage change)					
January 2003	1.6	2.3	2.2	2.5	2.5
August 2002	1.7	2.4	2.5	2.5	2.5
Unemployment Rate (Percent)					
January 2003	5.8	5.9	5.7	5.3	5.2
August 2002	5.9	5.9	5.5	5.2	5.2
Three-Month Treasury Bill Rate (Percent)					
January 2003	1.6	1.4	3.5	4.9	4.9
August 2002	1.7	2.9	4.8	4.9	4.9
Ten-Year Treasury Note Rate (Percent)					
January 2003	4.6	4.4	5.2	5.8	5.8
August 2002	4.9	5.4	5.8	5.8	5.8
Tax Bases (Percentage of GDP)					
Corporate book profits					
January 2003	6.2	6.8	7.3	9.2	8.5
August 2002	5.9	6.1	6.7	8.7	8.2
Wages and salaries					
January 2003	48.1	48.1	48.1	48.0	47.8
August 2002	48.3	48.4	48.2	48.4	48.4
Tax Bases (Billions of Dollars)					
Corporate book profits					
January 2003	653	739	842	1,267[a]	1,429[b]
August 2002	611	666	775	1,209[a]	1,408[b]
Wages and salaries					
January 2003	5,025	5,237	5,518	6,782[a]	8,231[b]
August 2002	5,034	5,282	5,561	6,848[a]	8,408[b]

Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

Note: Percentage changes are year over year.

a. Level in 2008.

b. Level in 2012.

c. The consumer price index for all urban consumers.

rates will return in 2011 to the higher rates that would have existed had the law not been enacted. (Last August's projections did not attempt to take the sunset provisions into account.) That tax increase will have complicated effects on the economy, which were described in Box 2-1. CBO's projections assume that growth will be slightly slower in 2011 and 2012 as a result of the tax increase, leaving the level of potential GDP about 0.5 percent lower in 2013 than it would have been otherwise.

CBO's projections do not explicitly incorporate specific cyclical recessions and recoveries beyond the next two years. To reflect the likelihood that at least one cyclical episode will occur in any 10-year period, CBO averages into its projections the effects of a typical business cycle, though without attempting to fix when that cycle might occur. Those medium-term projections extend historical trends in such underlying factors as the growth of productivity, the rate of national saving, and the size of various kinds of taxable income as a share of GDP. They also depend on projected growth in the labor force, which is based on projected demographic trends as well as on historical trends in the labor force participation rates of specific demographic groups. CBO's projections for real GDP, inflation, real interest rates, and tax revenues after 2004 rely critically on those underlying trends.

Potential Output

The projection for growth of potential output over the next 10 years (2.9 percent annually) is nearly 0.2 percentage points lower than CBO's August 2002 projection. Underlying the current projection for potential output are projections for the annual growth of the potential labor force (0.9 percent through 2013), potential hours worked (1.1 percent), capital (4.2 percent), and potential total factor productivity (1.2 percent). In addition, potential labor productivity in the nonfarm business sector grows at a 2.2 percent annual rate in CBO's projection (*see Table 2-5*).

The current projection for growth of potential output is lower than last summer's largely because the potential labor force is projected to increase more slowly, implying a lower projection for growth of hours worked in the nonfarm business sector. In the past, CBO used an average growth rate for the potential labor force through the medium term—similar to the procedure used for interest rates, inflation, and other variables—so that any year-to-year movements in those variables were not interpreted as indicating a forecast of business-cycle patterns. However, as CBO's projection horizon moves into the period when the baby-boom generation will begin to retire, that procedure becomes less defensible. Therefore, CBO has incorporated the slowing of labor force growth because of demographic trends into its projections. That revision clips about 0.1 percentage point from the growth rate of the potential labor force, lowering that growth to 0.9 percent from the 1 percent projected in CBO's August economic outlook.

In addition, capital accumulation is now projected to proceed at a slightly slower pace than CBO projected in last summer's outlook. CBO's current forecast for business investment as a share of GDP is lower than the previous projection, which reduces the contribution of capital to the growth of potential GDP by less than 0.1 percentage point. CBO revised its outlook for business investment because the burst of investment that typically occurs during the early months of a recovery was largely absent in 2002. Businesses seem to be able to meet modest increases in demand by boosting their efficiency rather than by increasing capacity.

The growth rate of potential total factor productivity (TFP), 1.2 percent a year, is essentially unchanged from CBO's August projection. The underlying trend in TFP growth has remained steady since the early 1980s at about 1 percent, and that continues to be true in CBO's current estimate, despite the decline in TFP caused by the 2001 recession (*see Figure 2-19*).[5] The adjustments to TFP are largely unchanged from last summer's projections, but one small revision merits an explanation. CBO has reassessed its estimate of how increased spending on security in the wake of the September 2001 terrorist attacks affects productivity growth. Since January 2002, CBO's forecasts have included an adjustment that reduced the level of TFP by about 0.3 percentage points in 2002 to account for the costs to private companies from additional spending on security guards and from delays

5. CBO estimates that underlying trend using historical data that have been adjusted to eliminate the effects of changes in the formulas for measuring inflation in the NIPAs and to remove the impact of technological progress in computer manufacturing from overall TFP.

Table 2-5.

Key Assumptions in CBO's Projection of Potential GDP

(By calendar year, in percent)

	Average Annual Growth						Projected Average Annual Growth		
	1951-1973	1974-1981	1982-1990	1991-1995	1996-2002	Total, 1951-2002	2003-2008	2009-2013	Total, 2003-2013
Overall Economy									
Potential GDP	3.9	3.3	3.0	2.6	3.3	3.4	3.0	2.7	2.9
Potential Labor Force	1.6	2.5	1.6	1.1	1.1	1.6	1.1	0.6	0.9
Potential Labor Force Productivity[a]	2.2	0.8	1.4	1.4	2.1	1.7	1.9	2.1	2.0
Nonfarm Business Sector									
Potential Output	4.0	3.6	3.1	2.9	3.8	3.7	3.4	3.1	3.3
Potential Hours Worked	1.3	2.2	1.5	1.5	1.5	1.5	1.3	0.8	1.1
Capital Input	3.7	4.4	3.6	2.5	4.9	3.8	3.9	4.6	4.2
Potential Total Factor Productivity	2.0	0.8	1.0	1.1	1.3	1.4	1.2	1.2	1.2
Potential TFP excluding adjustments	2.0	0.7	1.0	1.0	1.0	1.4	1.0	1.0	1.0
TFP adjustments	0	0	0	0	0.2	0	0.2	0.2	0.2
Computer quality	0	0	0	0	0.1	0	0.1	0.1	0.1
Price measurement	0	0	0	0	0.1	0	0.2	0.2	0.2
Additional spending on security	0	0	0	0	*	*	*	*	*
Contributions to Growth of Potential Output (Percentage points)									
Potential hours worked	0.9	1.5	1.1	1.0	1.0	1.1	0.9	0.5	0.7
Capital input	1.1	1.3	1.1	0.8	1.5	1.2	1.2	1.4	1.3
Potential TFP	2.0	0.8	1.0	1.1	1.3	1.4	1.2	1.2	1.2
Total Contributions	4.0	3.6	3.1	2.9	3.8	3.6	3.3	3.1	3.2
Memorandum:									
Potential Labor Productivity[b]	2.7	1.4	1.6	1.4	2.2	2.1	2.0	2.4	2.2
Effect of Expiration of 2001 Tax Law[c]	0	0	0	0	0	0	**	-0.1	*

Source: Congressional Budget Office.

Notes: CBO assumes that the growth rate of potential total factor productivity (TFP) changed after the business-cycle peaks of 1973, 1981, and 1990 and again after 1995.

* = between -0.05 percent and zero; ** = between zero and 0.05 percent.

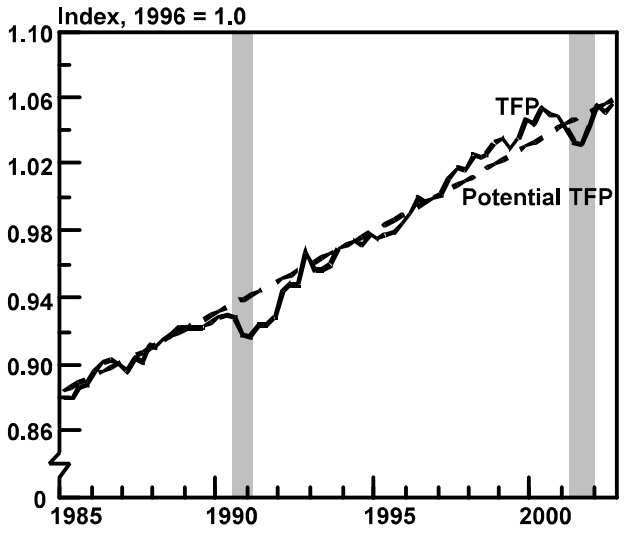
a. The ratio of potential GDP to the potential labor force.

b. Estimated trend in the ratio of output to hours worked in the nonfarm business sector.

c. The expiration of the Economic Growth and Tax Relief Reconciliation Act's tax cuts in 2011 is estimated to reduce the level of potential GDP in 2013 by 0.5 percent. Averaged over 11 years, that reduction in growth amounts to slightly less than 0.05 percentage points.

Figure 2-19.

Actual and Potential Total Factor Productivity



Source: Congressional Budget Office.

Note: The data are adjusted to exclude two factors: the effects of methodological changes in the measurement of prices, and the contribution to overall TFP growth of technological change in the production of computers.

in transportation because of heightened security.[6] Few data were available, however, on which to base that estimate, so it was only a rough guess intended to provide an upper limit on the expected effect.

Employment data are now available for the 12 months following the September 11 attacks. In particular, CBO has examined the monthly data for private employment in protective-services occupations—largely security guards and private detectives—and has found no above-trend growth since September 2001. Consequently, CBO has eliminated that component of the security cost adjustment from its estimate of potential TFP, which raises the level of potential TFP in 2002 by about 0.2 percent. However, the estimated effect on future growth, -0.03 percentage points per year, has not been revised. That effect results from the diversion of investment toward security equipment, which does not contribute to productivity as it is conventionally measured.

6. For more information, see Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2003-2012* (January 2002), Box 2-3.

Unemployment, Inflation, and Interest Rates

The medium-term projection for CPI-U inflation (2.5 percent a year between 2005 and 2013) is the same as CBO published in August, but the projection for growth in the GDP price index (an average annual rate of 2.2 percent) is 0.1 percentage point higher than last summer's projection. That increase occurred primarily because CBO slightly raised its projections for the growth of prices in various categories of investment and increased its projection for consumption as a share of GDP. Those changes reduced the difference between the growth of the GDP price index and that of the CPI-U. In general, CBO assumes that the inflation rate is determined by monetary policy in the medium term and that the Federal Reserve will seek to maintain the underlying rate of CPI-U inflation near 2.5 percent, on average.

The unemployment rate is projected to decline gradually in 2005 and 2006 and then average 5.2 percent thereafter. That decline mirrors the behavior of the gap between actual and potential output, which closes during the projection period because real GDP is assumed to grow more rapidly than potential GDP in that period.

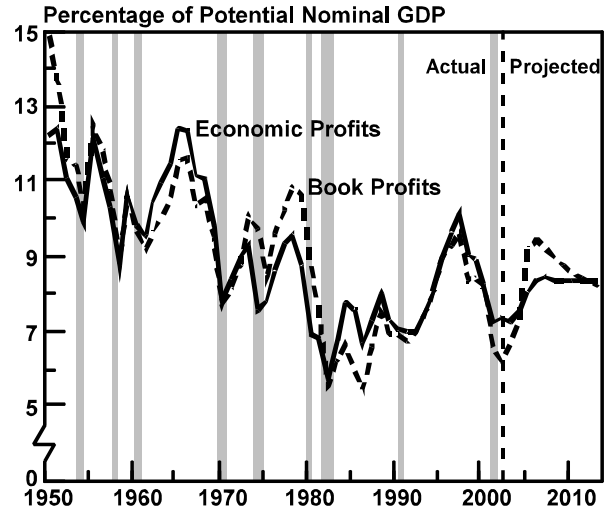
CBO's medium-term projections for interest rates have not changed since August. CBO estimates those rates by adding its projection for inflation to its projection for real interest rates. Using the CPI-U as a measure of price changes, CBO estimates that the real rate on three-month Treasury Bills will average 2.4 percent during the 2005-2013 period, and the real rate on 10-year Treasury notes will average 3.3 percent. Combined with the projected rates of CPI-U inflation, those real rates imply nominal rates of 4.9 percent for three-month Treasury bills and 5.8 percent for 10-year Treasury notes.

Taxable Income

CBO's budget projections are closely connected to its projections of economic activity and national income. However, different categories of income are taxed at different rates, and some are not taxed at all. Thus, the distribution of income among its various components is a crucial factor in CBO's economic projections. The categories of wage and salary disbursements and corporate profits are particularly significant because they are taxed at the highest effective rates.

Figure 2-20.

Corporate Profits



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Note: Economic profits are corporate profits from current production—that is, adjusted for changes in the value of inventories and for capital depreciation. Book profits (also known as before-tax profits) are calculated using book depreciation and standard accounting conventions for inventories.

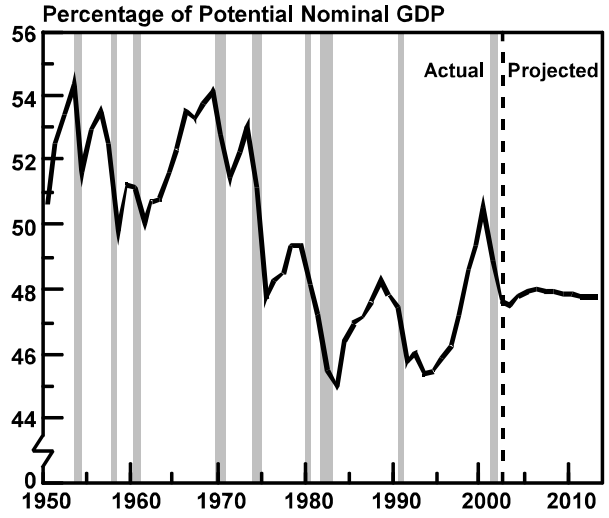
Two of the various NIPA measures of corporate profits are important for the forecast. *Book profits*, also known as before-tax profits, is the measure most closely related to the profits that companies report to the Internal Revenue Service. That measure is affected by changes in tax law. Corporations are allowed by law to value inventories and depreciate assets at certain rates, and the book measure of profits is designed to reflect those statutory requirements. By contrast, the *economic profits* measure is designed to reflect the valuation of inventories and the rates of depreciation that economists believe more truly represent the current value of inventories and the economic usefulness of the capital stock.

The economic stimulus law enacted in March 2002 allows firms, for a three-year period, to depreciate some of their capital stock much more rapidly than the estimated true economic depreciation rate. Because of that provision, book profits will be much lower than economic profits between September 11, 2001, and September 10, 2004; after that, book profits will be higher than economic profits because companies will have accelerated the use of their depreciation allowances to the previous period (*see Figure 2-20*).

Wages and salaries—the other NIPA income category important for revenue forecasting—will average about 48 percent of potential GDP during the 2005-2013 period, CBO projects (*see Figure 2-21*). That share of GDP is only slightly higher than its average of the past 25 years. CBO's projection assumes that the part of labor compensation made up of benefits (such as health insurance premiums) will continue to rebound from the lows of the late 1990s, which will dampen the wage and salary component of labor compensation.

Figure 2-21.

Wages and Salaries



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.